

# **International Journal of Primatology**

The Official Journal of the International Primatological Society

Volume 5, 1984

The *International Journal of Primatology* is a multidisciplinary journal devoted to basic primatology, i.e., to studies in which the primate is featured as such. To this end, the journal brings together laboratory and field studies from such diverse disciplines as anatomy, anthropology, ethology, paleontology, psychology, sociology, and zoology. The journal publishes high-quality original articles, short articles, and reviews that have been carefully referred by experts in the field, and also publishes book reviews. The journal aims to provide a forum for research workers and students in the field of fundamental primatology and to expedite communication between them and other scientists interested in nonhuman primates per se.

## **JOINT MANAGING EDITORS**

**J. A. Doyle**

Primate Behaviour Research Group  
University of the Witwatersrand  
Johannesburg, South Africa

**Matt Cartmill**

Department of Anatomy  
Duke University Medical Center  
Durham, North Carolina

## **JOINT EDITORIAL COMMITTEE**

**Irwin S. Bernstein**, University of Georgia, Athens, Georgia  
**J. Stephen Garlan**, University of Wisconsin, Madison, Wisconsin  
**R. D. Martin**, University College, London, England  
**William A. Mason**, University of California, Davis, California  
**Allan M. Schrier**, Brown University, Providence, Rhode Island

## **EDITORIAL BOARD**

**Craig F. Bielert**, University of the Witwatersrand, Johannesburg, South Africa  
**N. R. Chalmers**, The Open University, Milton Keynes, England  
**P. Charles-Dominique**, Muséum National d'Histoire Naturelle, Brunoy, France  
**David J. Chivers**, University of Cambridge, Cambridge, England  
**T. H. Clutton-Brock**, University of Cambridge, Cambridge, England  
**John H. Crook**, University of Bristol, Bristol, England  
**M. H. Day**, St. Thomas's Hospital Medical School, London, England  
**E. M. de Boer**, Royal Rotterdam Zoological and Botanical Gardens, Rotterdam, The Netherlands  
**Phyllis Dolhinow**, University of California, Berkeley, California  
**N. Richard Dukelow**, Michigan State University, East Lansing, Michigan  
**L. Egozcue**, Universidad Autónoma de Barcelona, Barcelona, Spain  
**Isela Epple**, University of Pennsylvania, Philadelphia, Pennsylvania  
**Andrew G. Hendrickx**, University of California, Davis, California  
**David Hewett-Elliott**, University of Michigan, Ann Arbor, Michigan  
**J. M. Hladik**, Muséum National d'Histoire Naturelle, Brunoy, France  
**R. Hoffstetter**, Muséum National d'Histoire Naturelle, Paris, France  
**Unichiro Itani**, Kyoto University, Kyoto, Japan  
**Gifford J. Jolly**, New York University, New York, New York  
**Richard F. Kay**, Duke University Medical Center, Durham, North Carolina  
**C. Anand Kumar**, All India Institute of Medical Sciences, New Delhi, India  
**V. Patrick Luckett**, University of Puerto Rico, San Juan, Puerto Rico  
**Volker Preuschhof**, Ruhr Universität Bochum, Bochum-Querenburg, West Germany  
**Leonard A. Rosenblum**, State University of New York Downstate Medical Center, Brooklyn, New York  
**Helma Rowell**, University of California, Berkeley, California  
**Duane M. Rumbaugh**, Georgia State University, Atlanta, Georgia  
**J. P. Sackett**, University of Washington, Seattle, Washington  
**Jeffrey H. Schwartz**, University of Pittsburgh, Pittsburgh, Pennsylvania  
**Orville A. Smith**, University of Washington, Seattle, Washington  
**Daniel R. Snyder**, Yale University School of Medicine, New Haven, Connecticut  
**Robert W. Sussman**, Washington University, St. Louis, Missouri  
**Ian Tattersall**, The American Museum of Natural History, New York, New York  
**Tusell H. Tuttle**, The University of Chicago, Chicago, Illinois  
**Adrienne Zihlman**, University of California, Santa Cruz, California

## **EDITORIAL ASSISTANT:** Kaye Brown

*International Journal of Primatology* is published bimonthly by Plenum Publishing Corporation, 233 Spring Street, New York, N.Y. 10013. Subscription orders should be addressed to the publisher. *International Journal of Primatology* is abstracted or indexed in Biosciences, Chemical Abstracts, Current Contents, Psychological Abstracts, and Referativnyi Zhurnal. © 1984 Plenum Publishing Corporation. *International Journal of Primatology* participates in the Copyright Clearance Center (CCC) Transactional Reporting Service. The appearance of a code name at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made by or personal or internal use. However, this consent is given on the condition that the copier pay the flat fee of \$3.50 per copy per article (no additional per-page fees) directly to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, Massachusetts 01970, for all copying not explicitly permitted by Sections 107 or 108 of the U.S. Copyright Law. The CCC is a nonprofit clearinghouse for the payment of photocopying fees by libraries and other users registered with the CCC. Therefore, this consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale, nor to the reprinting of figures, tables, and text excerpts. 0164-0291/84 \$3.50

Subscription rates:

Volume 5, 1984 (6 issues) \$75.00 (outside the U.S., \$86.00).

Volume 6, 1985 (6 issues) \$95.00 (outside the U.S., \$108.00).

Application to mail at second-class postage rates is pending at New York, N.Y. 10199-9541. Postmaster: Send address changes to *International Journal of Primatology*, Plenum Publishing Corporation, 233 Spring Street, New York, N.Y. 10013.

Printed in the USA.

*International Journal of Primatology* is published quarterly by Plenum Publishing Corporation, 233 Spring Street, New York, N.Y. 10013. Subscription orders should be addressed to the publisher. *International Journal of Primatology* is abstracted or indexed in Biosciences, Chemical Abstracts, Current Contents, Psychological Abstracts, and Referativnyi Zhurnal. © 1984 Plenum Publishing Corporation. *International Journal of Primatology* participates in the Copyright Clearance Center (CCC) Transactional Reporting Service. The appearance of a code line at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use. However, this consent is given on the condition that the copier pay the flat fee of \$3.50 per copy per article (no additional per-page fees) directly to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, Massachusetts 01970, for all copying not explicitly permitted by Sections 107 or 108 of the U.S. Copyright Law. The CCC is a nonprofit clearinghouse for the payment of photocopying fees by libraries and other users registered with the CCC. Therefore, this consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale, nor to the reprinting of figures, tables, and text excerpts. 0164-0291/84 \$3.50

# **International Journal of Primatology**

**Vol. 5, No. 1**

(published January 24, 1984)

**February 1984**

---

## **CONTENTS**

Proposed Nutritional Importance of Plant Exudates in the Diet of the Panamanian Tamarin, <i>Saguinus oedipus geoffroyi</i> <i>Paul A. Garber</i>	1
Breeding Seasonality Among Long-Tailed Macaques, <i>Macaca fascicularis</i> , in Peninsular Malaysia <i>Michael Kavanagh and Elisabeth Laursen</i>	17
Social Interactions Among Adult Male Langurs ( <i>Presbytis entellus</i> ) at Rajaji Wildlife Sanctuary <i>John W. Laws and Julia Vonder Haar Laws</i>	31
The Niche of the Potto, <i>Perodicticus potto</i> <i>John F. Oates</i>	51
Dentition of <i>Sivaladapis nagrii</i> (Adapidae) from the Late Miocene of India <i>Philip D. Gingerich and Ashok Sahni</i>	63
<b>REVIEW ARTICLE</b>	
Monkeys with Mirrors: Some Questions for Primate Psychology <i>James R. Anderson</i>	81
Book Review: <i>Nocturnal Malagasy Primates: Ecology, Physiology and Behavior</i>	99

---

# **International Journal of Primatology**

**Vol. 5, No. 2**

(published March 6, 1984)

**April 1984**

---

## **CONTENTS**

Resource Use by Howler Monkeys ( <i>Alouatta palliata</i> ) in the Rain Forest of Los Tuxtlas, Veracruz, Mexico <i>Alejandro Estrada</i>	105
Female Rank and Reproductive Success Among Arashiyama B Japanese Macaques ( <i>Macaca fuscata</i> ) <i>Linda D. Wolfe</i>	133
Aggression in Adult Male Primates: A Comparison of Confined Japanese Macaques and Free-Ranging Olive Baboons <i>G. Gray Eaton</i>	145
Generalization Between Productive Use and Receptive Discrimination of Names in an Artificial Visual Language by a Chimpanzee <i>Tetsuya Kojima</i>	161
Testicular Histology of the Dusky Leaf Monkey ( <i>Presbytis obscura</i> ) as It Relates to Birth Pattern in Peninsular Malaysia <i>G. J. Burton</i>	183
<hr/> <i>Book Review: The Orang-utan: Its Biology and Conservation</i>	197

# International Journal of Primatology

Vol. 5, No. 3

(published May 31, 1984)

June 1984

---

## CONTENTS

A Quantitative Description of Copulatory and Associated Behaviors of Captive Marmosets ( <i>Callithrix jacchus</i> ) <i>Keith M. Kendrick and Alan F. Dixson</i>	199
Chimpanzee Predation in the Mahale Mountains from August 1979 to May 1982 <i>Yukio Takahata, Toshikazu Hasegawa, and Toshisada Nishida</i>	213
Discrimination by Male Ring-Tailed Lemurs ( <i>Lemur catta</i> ) Between the Scent Marks of Male and Those of Female Conspecifics <i>Susan J. Dugmore, Keith Bailey, and Charles S. Evans</i>	235
Spatial Structure of Chacma Baboon Groups <i>Curt D. Busse</i>	247
Predation by Vervet Monkeys in an Outdoor Enclosure: The Effect of Age, Rank, and Kinship on Prey Capture and Consumption <i>Lynn A. Fairbanks</i>	263
Habitat Distribution and Habitat Preference in Barbary Macaques ( <i>Macaca sylvanus</i> ) <i>J. E. Fa</i>	273
Restoration of Sexual Performance in Old Rhesus Macaques Paired with a Preferred Female Partner <i>Kathleen C. Chambers and Charles H. Phoenix</i>	287
Book Review: <i>Primate Communication</i>	299

# **International Journal of Primatology**

**Vol. 5, No. 4**

(published June 18, 1984)

**August 1984**

---

## **CONTENTS**

### **SPECIAL ISSUE: Abstracts of the Xth Congress of the International Primatology Society**

Symposia and Workshops ( <i>Abstracts 0001-0019</i> )	305
Paper and Poster Sessions ( <i>Abstracts 0020-0252B</i> )	317
Film and Videotape Sessions ( <i>Abstracts 0253-0267</i> )	397
<b>AUTHOR INDEX</b>	403

---

# International Journal of Primatology

Vol. 5, No. 5

(published August 22, 1984)

October 1984

---

## CONTENTS

Association, Ranging, and the Social Unit in Chimpanzees of the Mahale Mountains, Tanzania <i>Kenji Kawanaka</i>	411
Optimal Foraging Strategies in the Diet of the Green Monkey, <i>Cercopithecus sabaeus</i> , at Mt. Assirik, Senegal <i>Michael J. S. Harrison</i>	435
Intragroup Agonistic Behavior in Captive Groups of the Common Marmoset <i>Callithrix jacchus jacchus</i> <i>A. G. Sutcliffe and T. B. Poole</i>	473
Habitat, Diet, and Activity Patterns of Free-Ranging Woolly Spider Monkeys ( <i>Brachyteles arachnoides</i> E. Geoffroy 1806) <i>Katharine Milton</i>	491

---

## **International Journal of Primatology**

**Vol. 5, No. 6** (scheduled publication October 31, 1984) **December 1984**

---

### **CONTENTS**

Sexual Dimorphism in Weight Among the Primates: The Relative Impact of Allometry and Sexual Selection <i>Steven J. C. Gaulin and Lee Douglas Sailer</i>	515
Female Transfer in Primates <i>Jim Moore</i>	537
An Experimental Analysis of Social Interaction in the Common Marmoset ( <i>Callithrix jacchus jacchus</i> ) <i>A. G. Sutcliffe and T. B. Poole</i>	591

---